

**DESCRIPTION**

**Source** Mouse myeloma cell line, NS0-derived  
Leu25-Ala177  
Accession # AAN40906

**N-terminal Sequence Analysis** Leu25

**Predicted Molecular Mass** 18 kDa

**SPECIFICATIONS**

**SDS-PAGE** 20-30 kDa, reducing conditions

**Activity** Measured in a cell proliferation assay using BaF3 mouse pro-B cells transfected with human IL-20 R $\alpha$  and human IL-20 R $\beta$ . The ED<sub>50</sub> for this effect is typically 0.1-0.6 ng/mL.

**Endotoxin Level** <0.10 EU per 1  $\mu$ g of the protein by the LAL method.

**Purity** >95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.

**Formulation** Lyophilized from a 0.2  $\mu$ m filtered solution in PBS. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

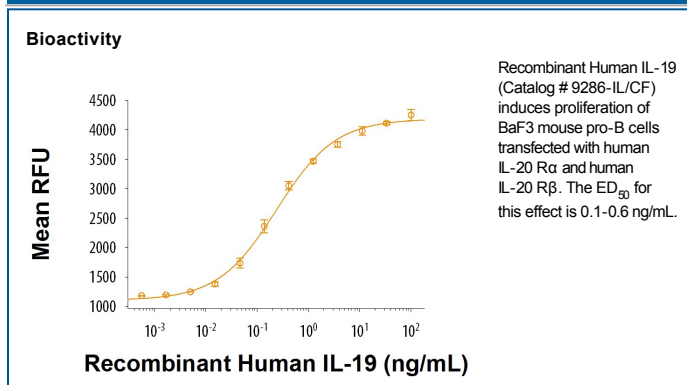
**Reconstitution** Reconstitute at 500  $\mu$ g/mL in PBS.

**Shipping** The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

**DATA**



**BACKGROUND**

Interleukin 19 (IL-19) is a member of the IL-10 family of class II  $\alpha$ -helical cytokines that contains two groups, a viral homolog and cellular homolog group. Within the cellular homolog group, there are two additional groupings, one which uses IL-10 R beta as a signal transducing receptor (IL-10, IL-22, and IL-26), and one which uses IL-20 R beta as a signal transducing receptor (IL-19, IL-20, and IL-24) (1). The 153 amino acid (aa) mature human IL-19 is secreted as a glycosylated 35-45 kDa monomer (2-4). It shares approximately 70% aa sequence identity with mouse and rat IL-19. Human IL-19 may utilize an alternate start site that adds 38 aa to the N-terminus. Although mouse IL-19 is active on human cells, human IL-19 is not active on mouse cells (2). IL-19 is expressed on activated keratinocytes, monocytes, and B cells (3, 5, 6). It binds a receptor complex consisting of IL-20 R alpha and IL-20 R beta (3, 7, 8). This receptor complex is also shared by IL-20 and IL-24 (9, 10). It has been reported that IL-19 both will and will not induce IL-6 and TNF- $\alpha$  production by monocytes (2, 11). It does, however, drive T helper cell differentiation towards a Th2 response, inducing both IL-10 and production of itself (2, 11, 12).

**References:**

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